



Project Title: SAR Design and Siting

County: Walla Walla

1. Applicant Information		
Applicant name	Phone no.	Fax no.
Walla Walla County Conservation District	(509)522-6340 x 3	(509) 525-2811
Address		
325 N. 13 th Avenue		
City	State	Zip code
Walla Walla	WA	99362
Email address		
Rick.jones@my180.net		
Water right holder name (If applicable and if other	Phone Number	Fax Number
than applicant)	()	()
Mailing address		
City	State	Zip code
2. Project Location		
Project name SAR Design and Siting		
Project location Service area of West Side ID, East Side ID, Old Lowden Ditc	h and Rangavin William	s Ditch



3. Project Type and Description		
(Check all that apply)		
Conservation and/or infrastructure improvement (pumps and pipes)		
Water storage feasibility study	X	
Water exchange or water right acquisition		,
Please describe your project in detail		
We are requesting funds to assess the impacts of irrigat help solidify ideas as to the type of shallow aquifer rech located. Our approach will be to utilize the services of groundwater monitoring study in concert with our staff of site specific designs for efficient and effective shallo mitigate the negative impacts of piping on groundwater	parge projects needed and a professional hydro-ged and then work with our e w aquifer recharge projec	d where they should be plogist to conduct a ngineer on development

Use this box to make any other comments regarding the project and water rights involved

We have solicited and received assistance from Bob Bower on the potential groundwater issues associated with piping projects and we intend to utilize his groundwater assessment work as much as possible. However, he pointed out that our requirements are beyond the scope of his basin scale assessment and that it will be necessary for us to do a more detailed, site specific evaluation to attain our goal of actual implementation of a shallow aquifer mitigation project. We are submitting this proposal as a result of Mr. Bower's advice that we hire a professional hydro-geologist to help us develop specific plans for addressing potential groundwater issues.

This will be the first project of its kind in the basin and we are assuming that ECY has a workable precedent on the water rights issues associated with a groundwater recharge project like we are considering here.

We have long recognized that there could be negative impacts to people and natural resources that are dependent on groundwater. While we have enthusiastically supported the concept of recharging the gravel aquifer when water is abundant, we have no known precedent to follow. We are very aware of the Hudson Bay and Loker Road SAR projects but they are located in areas with an abundance of gravel — a very different soil type and permeability than the water laid silt loams that are very dominant in the East Side / West Side IDs and less so but still dominant in the Bergevin-Williams / Old Lowden service area. In view of the ambitious infrastructure improvement program we have planned for the next 5 years (see below), we feel it is critical that we understand the impacts of piping and how to mitigate those impacts with strategically placed, well designed SAR projects.



Our ultimate goals for the Touchet-Lowden irrigated area include the following:

- A. Improve the Hofer Dam diversion and pipe both the West Side Irrigation District and East Side Irrigation District. Hofer Dam was updated in 2006, West Side Irrigation District was piped in 2007 and the East Side Irrigation District piping project which was started in November, 2008 is scheduled for completion in April, 2009.
- B. Consolidate the diversions for Lowden 2, Garden City, Mud Creek 7, Old Lowden, and Bergevin-Williams ditches(all of the Lower Walla Walla Ditches) into the existing modern diversion located at RM 39.2 which was built by CTUIR/BPA in 2001. We have an engineering firm developing a design and construction of the diversion upgrades is planned for Jul-Oct, 2009.
- C. Consolidate Old Lowden and Bergevin-Williams ditches into one pipeline. We are currently well along on the design and water rights work on this project and construction of the pipeline is planned to begin Nov, 2009.
- D. Design and install the Garden City pipeline. The preliminary work on the design has been completed but considerable effort will be required to work through the water rights issues. We would anticipate having the design and water rights efforts complete and ready for construction in the Nov, 2010-Apr 2011 time frame. If the Mud Creek 7 water right issues prove to be impossible to resolve we will focus on just the Garden City ditch.
- E. Install the Lowden 2 pipeline. The design work on this project is nearly complete as a result of an unsuccessful effort to pipe the Lowden 2 ditch in 2004-05. This was the first attempt in the basin at a piping project and we failed to convince all irrigators of the positive effect it would have on their farm income. However, there has been a tremendous amount of positive discussion in the Touchet-Lowden irrigation community about the West Side Irrigation District pipeline which has been in operation for a full irrigation season. We believe this will be sufficient to persuade Lowden 2 irrigators to cooperate. Consequently, construction of the Lowden 2 pipeline is tentatively planned for Nov, 2011-Apr, 2012.
- F. Install the Mud Creek 7 pipeline. Provided we successfully execute our plan for the Garden City piping project which include abandonment of the upper ½ mile of the Mud Creek 7 ditch, there will be 1.0 mile of the Mud Creek 7 ditch remaining to be piped. It would be logical for us to combine the Lowden 2 and Mud Creek 7 design and construct efforts since most of the Mud Creek 7 irrigators also have water rights on Lowden 2. Therefore, construction of the Mud Creek 7 pipeline is also tentatively planned for Nov, 2011-Apr, 2012.
- G. With successful completion of the diversion and piping projects described above it means that the entire irrigated area between roughly RM 25 and RM 32 on the lower Walla Walla would now divert from one point and landowners would have an unprecedented ability to manage their water. We plan to use WWCCD's historically good relationship with landowners and the good will created by the aforementioned projects to organize this entire area into one or more irrigation district(s) or other similarly functioning entity. We believe that ECY water right regulation at the point of diversion and maximum flexibility for water use within the boundary defined by this new entity embraces the intent of the Water Management Initiative. Furthermore, we believe that this new ability to manage water will lead to a multitude of on-farm IEGP projects that will, at a minimum, eliminate most if not all flood irrigation and increase in-stream flows accordingly. We will use the West Side and East Side Irrigation Districts, to the extent possible, as an example and template for the new organization. These districts serve the irrigated area between RM 19 to RM 25 of the Walla Walla River.
- H. With successful completion of the diversion and piping projects described above it also means that



conditions would be conducive to full blown restoration of Mud Creek. Our plan for Mud Creek includes flow augmentation with Trust water which would be introduced at the Lowden 2 pipeline crossing, restoration of channel geometry, restoration of instream habitat, and restoration of riparian habitat via CREP. WDFW has sampled fish fauna in the lower reaches of Mud Creek for several years and proven that ESA listed Mid-Columbia steelhead trout inhabit the stream. WDFW is very supportive of this restoration effort and we would expect WDFW to guide our restoration efforts.

Describe the project by task (statement of work)

The WWCCD will accomplish the following tasks:

Task 1 Design Groundwater Studies

- Acquire the services of the professional hydro-geologist
- Develop a study plan for the East Side / West Side ID service area
- Develop a study plan for the OLDC / B{W service area

Deliverables: Two Final Study Plan by August, 2009.

Task 2 Conduct the Studies as Designed

- Collect field data according to prescribed protocol for 2 years
 - 1. Purchase equipment and hire temporary technician to conduct field work OR
 - Contract with college or other capable entity to conduct field work
- Forward hydro-geologist raw data as it becomes available
- Hydro-geologist analysis of data summarized in annual reports

Deliverables: Complete Data Collection - Nov, 2009 to Nov, 2011.

Task 3 Develop Engineered Plans for Properly Located, Effective and Efficient Recharge Projects

- Hydro-geologist and WWCCD engineer consult and develop site specific conceptual plans
- Hydro-geologist, WWCCD engineer and WWCCD project manager consult with owners of potential sites to identify willing landowners
- Hydro-geologist and WWCCD staff select best options for projects
- Engineer completes design, cost estimate and bid packet

Deliverables: Final Designs by December, 2011.

Task 4 Administration

- Work with ECY on water rights issues associated with permanent recharge project
- Secure all permits and clearances prior to construction
- Provide progress reports and invoices as they are due

Deliverables: Invoices and progress reports Monthly through December, 2011



4. Pi	roject Budget
Project Bu	ıdget
\$92,500	
Total bud	get by project task or by expenditure
Task 1 D	esign Groundwater Studies\$15,000
	Acquire the services of the professional hydro-geologist
	Develop a study plan for the East Side / West Side ID service area
	Develop a study plan for the OLDC / B{W service area
Task 2 C	onduct the Studies as Designed\$40,000
	 Collect field data according to prescribed protocol for 2 years 1. Purchase equipment and hire temporary technician to conduct field work OR 2. Contract with college or other capable entity to conduct field work
	Forward hydro-geologist raw data as it becomes available
	Hydro-geologist analysis of data summarized in annual reports
Task 3 D	evelop Engineered Plans Recharge Projects\$30,000
	Hydro-geologist and WWCCD engineer consult and develop site specific conceptual plans
	 Hydro-geologist, WWCCD engineer and WWCCD project manager consult with owners of potential sites to identify willing landowners
	Hydro-geologist and WWCCD staff select best options for projects
	Engineer completes design, cost estimate and bid packet
Task 4 A	dministration\$7,500
	 Work with ECY on water rights issues associated with permanent recharge project
	Secure all permits and clearances prior to construction
	Provide progress reports and invoices as they are due



5. Funding Source Information

Total project amount expected to be provided by sources other than this program (dollar total and percent of project budget)

\$10,000 - engineer recharge projects Old Lowden and Bergevin-Williams

Identify sources and type of funding other than through this program grant. Include expected dates of participation. Include as an attachment; letters of commitment, offer letters, application approvals, etc. Source and type of funding: ECY grant #G0900084 Amount: \$10,000 (only if we have sufficient groundwater information to proceed with engineering) Status: Secured Dates of participation: expires 12/31/2010 Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation: Source and type of funding: Amount: Status: Dates of participation:



6. Instream Flow and other Instream H	abitat Benefits	
A. Water Right Information - Attach Water Right (You may skip this section if this application is for		Study funding)
Water right holder's name (if other than applicant)	Phone no:	Fax no:
Address		
City	State	Zip code
Complete legal description of the property attached to thi	s water right:	
Water right number:		
Parcel number associated with this water right:		
Do you own the property proposed for this project? If not	t, please explain:	
If the grant applicant is not the water right holder, please	explain the reason:	
Water source_(Stream name).		
B. Water Usage		
Has water been put to beneficial use in the past five years	3?	
Yes □ No □ I don't know □		
Describe that use in terms of the specific beneficial use d	uring that period:	
(Please attach any available documents that verify that us photographs, power company records, flow meter records FSA records)	_	-



Has beneficial use of this water ceased for Yes ☐ No ☐	or a period of five or more years during any period since 1967?
	water quantified under the water right discussed above. es: domestic, irrigation, municipal); system type; if irrigation,
Quantify as nearly as possible current wa Application for Transfer of Water Right t	ter use: This information will be provided when the o Trust is finalized and submitted
Instantaneous rate (QI) of use:	CFS
Annual rate (QA) of use	ACRE- FEET
Historic beneficial use quantity of the wa instantaneous and annual quantities)	ter right (highest of the last 5 years/ irrigation seasons in
CFS ACRE-FE	ET
If irrigation, how many acres are irrigated	l under this water right?
Are there other water rights associated wi	th this specific water right?
In order to process this pre-application ec previous five years; please attach copies of	ology requires the following information (include for the of all documents and maps)
• Power data (contact local power u	tility for pump records, etc.)
• Historical crop type data (contact	local FSA office)
• Flow meter records (contact local	
• Aerial photos (contact local FSA	office)



C. Estimated Total Water Savings

Infrastructure projects: Estimate the water to be conserved through this project. Provide engineering or technical analysis to support this estimate.

MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOT
QA (ACRE-FEET)				•									
QI (CFS)													

D. Additional Inst				
Describe other instrea	am benefits envision	ed as a result of fur	nding this project:	



7. Resources currently committed to ensure long-term performance of the proposed project (operation and maintenance).
Who is responsible for long-term operation and maintenance of the project?
Have operation and maintenance costs been identified? Yes ☐ No ☐
If yes, please describe:
Summarize these costs on an annual basis below:
Are measurement devices other than diversion source meters necessary to monitor compliance with the project intent or plan? Yes No No If yes, please describe:
Does a water measurement device exist on the source <u>and</u> downstream of the proposed project? yes no
If no, will a water measurement device be installed as part of this project? Yes No If yes, describe location and operating entity:
If yes, provide the river mile:
What is the nearest stream gage downstream of the proposed project? Source name
USGS satellite linked
River mile:



8. Proponent's Readiness to Procee	ed in the second of the second				
Describe status of feasibility reports, engineering design, and permits. Provide documentation for these deliverables and describe the project effort timeline as appropriate (submit two (2) copies of all required documents).					
Does the project proponent own the land for the prop- documented access to the right of way or owns an east appropriate documentation including title report as ap	sement to the property proposed (please attach				
Design/Engineering Status:					
Pre-planning (pre - permitting)	Status:				
Pre-design (design reports) (10%)	Status:				
Schematic design (30%)	Status:				
Design development (75%)	Status:				
Construction documents (95%)	Status:				
Bid documents (ready for bid)	Status:				
Permit Status					
SEPA	Status:				
401	Status:				
Dept. of Fish and Wildlife consultation	Status:				
Storage and/or Secondary Use Permit	Status:				
Other: ()	Status:				
Other:()	Status:				
Other: ()	Status:				



9. Signatures (send this sheet electronically and by original signature in surface mail)

I certify that the information above is true and accurate to the best of my knowledge.

I understand that in order to process my application, I am hereby granting staff from the Department of Ecology access to the above site(s) for inspection and monitoring purposes.

If assisted in the preparation of the above application, I understand that all responsibility for the accuracy of the information rests with me.

I also understand that I may rescind this application at any time prior to signing the Agreement with no other obligations or requirements.

(Applicant/ Grant Recipient)		12/31/2008 (Date)		
(Water Right Holder)		(Date)		
(Land Owner(s) of Existing Place	of Use)	(Date)		
For More Information Contact:	Dave Burdic Voice: (360) Email:	407-6094		

If you need this document in an alternate format, please call the Water Resources Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.